QUARTERLY NEWSLETTER ON SUSTAINABLE AND RESPONSIBLE INVESTMENT (SRI) AND THE SUSTAINABILITY ANALYSIS OF COMPANIES.

Looking Ahead

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Foreword

Welcome to the second issue of 2010. Our opening article, which looks into the carbon footprint of investments, shows that disclosure on carbon dioxide and other GHG emissions is emerging at various levels. Our sector study goes on to investigate the sustainability challenges and opportunities in the construction sector. Then follows an interview with Laurent Milliat on the impact of energy efficiency on the utilities sector.

We do hope you will enjoy reading this fourteenth (overall) issue! All feedback is welcome.

> **investor.support-dam@dexia.com**

A new Head of SRI, **the same commitment**

After almost ten years at Dexia Asset Management, Gaëtan Herinckx decided the time was ripe for a new challenge. Back in 2001, Gaëtan joined Dexia AM as SRI fund manager. In 2007, he became Head of Sustainable and Responsible Investment with the objective of expanding our European leadership in the field through the development of a comprehensive SRI offer, which is, today, one of the largest and most innovative in the industry. In March 2010, Gaëtan Herinckx joined an independent owner-managed asset manager based in South Africa.

During those ten years, Dexia AM has indeed been positioned as one of the foremost players on the European SRI market, with a 6% market share of the SRI fund market in Europe. As at the end of March 2010, we were managing EUR 20 billion in SRI, including 6 billion under the auspices of Dexia AM's standard SRI approach and 14 billion in tailor-made SRI solutions that, needless to say, respect international standards. Boasting more than 20 sustainable funds/subfunds across all asset classes, we are able to provide a full range of SRI solutions to our clients.

Isabelle Cabie, our new Head of Sustainable and Responsible Investment, is well positioned to assume Gaëtan's mantle. Isabelle joined Dexia AM, at the time Paribas Bank Belgium, almost 18 years ago. She first honed her research capabilities as a macro economist, analysing the drivers of economic growth, and then started building up investment expertise as an asset manager specialised in fixed income. Since 1998, Isabelle has been involved in the management of institutional mandates, both traditional and SRI, first as senior asset manager and later as global head of institutional portfolio management. She is therefore the ideal person to replace Gaëtan and help consolidate Dexia AM's position as market leader in SRI.

With Isabelle taking over the SRI department, it is probably a good time to stress why our commitment to the growth and mainstreaming of SRI does not stop there. Delivering high-quality SRI investment solutions to our clients, based on a rigorous analytical framework, remains of key importance.

Isabelle Cabie provides some insight into Dexia AM's vision of SRI and its key growth drivers in the foreseeable future.

"Investors are increasingly demanding better corporate governance and sound business models. SRI systematically takes into account governance issues and companies' exposure to long-term trends such as climate change, resource depletion and health & wellness, all elements that are part and parcel of the investment decision. We are therefore convinced that SRI rightfully addresses investors' legitimate requests. In the same vein, the PRI (Principles for Responsible Investment) to which we and many other asset managers and investors are signatory, are growing in importance. They certainly provide an appropriate framework for the integration of environmental, social and corporate governance (ESG) issues in investment portfolios."

A second element that will drive the SRI market in years to come is the more widespread use of SRI screening and its extension to new regions, from developed countries to emerging ones, and to more asset classes. Isabelle Cabie contends that the diversity of the SRI approach is also an important element in this: "Institutional clients, depending on their needs, require various approaches to SRI. It is important as an asset manager to offer the full spectrum, namely the core best-in-class and norms-based approaches next to satellite approaches such as thematic and ethical screening. This should be done across all asset classes, because, in the market, we are seeing that, besides equity SRI funds, bonds, balanced, structured products and money market funds are all gaining traction and are much sought-after by institutional clients. As a responsible asset manager, we want to foster the mainstreaming of SRI and we do this by having a wide range of SRI funds".

All these elements lead us to conclude that SRI is becoming increasingly accepted as part of any standard investment approach. Dexia AM, ever the pioneer, seeks to be a reliable partner for its SRI-committed clients.

Isabelle Cabie's concluding remarks: "It is you, our client, who makes this possible by entrusting us with your investments. My role, and that of my SRI team, will be to consolidate our position. Proximity to our clients, transparency and well-performing investment solutions will be key. In the spirit of placing investors at the heart of SRI, we recently launched a new and fully dedicated website. The look and feel of this internet site provides a dynamic and user-friendly environment that affords easy and intuitive browsing. I warmly invite you to browse *www.sri.dexia-am.com*."

Isabelle Cabie

Head of Sustainable and Responsible Investment

Dexia Asset Management

Thematic study

Measuring the Carbon Footprint of Investments: Sustainability Team Discussion Paper

- Climate change more of a talking point than ever.
- Disclosure on carbon dioxide and other GHG emissions is emerging at various levels: on consumer products, in companies' annual disclosures and, more recently, in investments.
- Various methodologies for calculating the carbon footprints of investments have been developed.
- Carbon footprint measurements provide a suitable starting point for an assessment of sustainable performance.

1. Introduction – Climate change and carbon intensity in the public eye

1.1. Climate change and carbon intensity in the public eye

Climate change is an issue currently on everyone's lips. As a result, record amounts of data relating to carbon and other greenhouse gas (GHG) emissions are being disclosed. At consumer level, the push for a greater degree of carbon data disclosure is apparent from the increase in the number of products seen to display carbon footprint labels. The first such labels to appear on consumer products were introduced in 2007 by a collaboration of companies and the UK-based organisation, Carbon Trust, on items such as potato crisp packets, shampoo bottles/sachets and drinks containers. Since then, their numbers have soared across the globe, while consumers can also access an increasing number of online carbon footprint calculators launched by organisations

Calculate your personal carbon footprint:
www.footprint.wwf.org.uk

such as WWF or the US Environmental Protection Agency (EPA) to calculate the impact of their own lifestyles. The importance of climate change in business is also ever-growing as companies come face to face with the potential inherent physical, reputational, regulatory and financial risks involved. Since the early 2000s, more and more companies are measuring and voluntarily disclosing their GHG emissions. As the saying goes, you can't manage what you can't measure, so it makes sense for businesses to use carbon and GHG emissions as an indication of their sustainable performance. Alongside this, initiatives such as the Carbon Disclosure Project (CDP), supported by investors, are also pushing for greater corporate disclosure. Measuring the carbon footprint of investments is the latest evolution in the carbon disclosure trend, as investors increasingly see the need to address climate change in investment management. This study, by identifying and assessing current existing methodologies, looks at how investors measure the carbon footprint of their investments before examining the use and value of such calculations in mitigating climate change exposure.

1.2. Why are climate change and carbon intensity important issues for investors?

The risk of climate change exposure has emerged as an important theme for investors in recent years because of the accompanying financial implications. Consumers' increasing awareness of their own carbon footprint is making them seek out less carbon-intensive products, while policies seeking to control GHG emissions could place a financial burden on companies. Cap-and-trade schemes provide financial incentives for companies to adhere to GHG emissions reduction programmes. In the EU, the Emissions Trading Scheme (EU ETS), launched in 2005, benefits companies striving to reduce their carbon intensity and could negatively impact those that exceed their limits, as these companies need to purchase carbon allowances. Similarly, in the US, the American Clean Energy and Security Act of 2009 (ACES) proposes a cap-and-trade system whereby companies are allocated carbon allowances which they are then free to sell at a profit, or buy from others at a loss. Carbon emission taxes which require emitters to pay a charge per ton of GHG released into the atmosphere through the production, use or distribution of fossil fuels can also place financial burdens on companies. Both cap-and-trade schemes and carbon taxes could potentially lead to a rise in operating costs for businesses, more particularly for companies that have carbon-intensive production processes and/or energy sources. Carbon costs can thus influence companies' earnings and valuations.

Examples of existing legislation/schemes

Regulation	Location	Year
Carbon Tax	Finland	1990
Carbon Tax	Sweden	1991
EU Emissions Trading Scheme	EU	2005
Carbon Tax	California	2008
NZ Emissions Trading Scheme	New Zealand	2008
EPA GHG Mandatory Reporting Rule	US	2010

Source: Dexia AM

It is not just risk that is increasingly motivating investors to take into account GHG emissions – companies can also benefit from the financial opportunities related to carbon challenges. For instance, those with installations regulated under cap-and-trade schemes could benefit from a surplus of allowances, while companies providing services enabling a reduction in, or the accounting of, GHG emissions would also benefit from this trend. Other examples include the development and use of renewable energy sources, and the satisfaction of consumer demand for less carbon-intensive products.

The degree to which companies will be exposed to climate change risks and opportunities depends on factors such as the industries they are in or the geographical location of their operations. It is, nonetheless, undeniable that all companies will somehow be impacted by these changes and that investment management needs to take them into consideration.

While minimising a company's carbon footprint makes sense in the battle to reduce climate change exposure, many are those who want to see whether the carbon footprint of investments can be just as effective. It remains to be seen how these types of figures will progress and if they will prove valuable to investment management.

2. How is the carbon footprint of investments calculated?

2.1. What is a carbon footprint?

A carbon footprint is defined as the total amount of GHG emissions emitted by an entity (be it a product or a company), generally expressed in carbon dioxide equivalents (CO_2e). In this definition, "total" is often interpreted to mean different things, particularly in terms of the scope of emissions and the extent to which emissions from various stages of the value chain should be included. Indeed, there are many different ways to define and analyse total GHG emissions: the life-cycle assessment (LCA), for instance, which investigates and evaluates the environmental impacts associated with a product, service or process throughout its lifecycle, can vary greatly depending on the phases included.

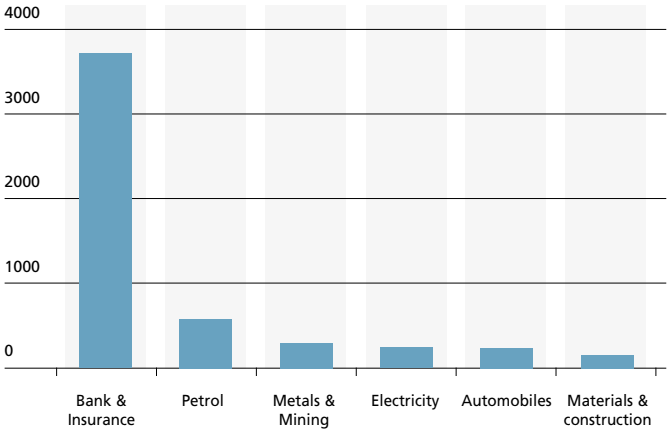
Example of the different "total" emissions included in a product's footprint

LCA Type	Cradle-to-Grave	Cradle-to-Gate
Raw material sourcing	✓	✓
Transport of raw material	✓	✓
Production	✓	✓
Packaging	✓	✓
Transport	✓	✓ ✗
Use	✓	✗
Disposal	✓	✗

Source: Dexia AM

The carbon footprint of a company, just like that of a product, depends largely on its sector. The total emissions of a company whose carbon footprint is calculated can vary greatly depending on the scope of emissions taken into consideration. This is illustrated by a recent study[1] on the carbon emissions of French industries, which indicated that, when taking into account third-tier suppliers and users, the banking and insurance sectors were the most carbon-intensive, when traditionally, sectors such as energy, metals & mining and pulp & paper are considered to be the most carbon-intensive. A company's LCA can comprise upstream and/or downstream operations and include direct emissions only or both direct and indirect ones. To avoid confusion and inconsistency when the term "total" is used, it should really include all emissions (although it seldom does).

The carbon footprint of different industries – taking into account scope 1 to scope 3, expressed as millions of tonnes of CO_2e



Source: WWF & Vigeo

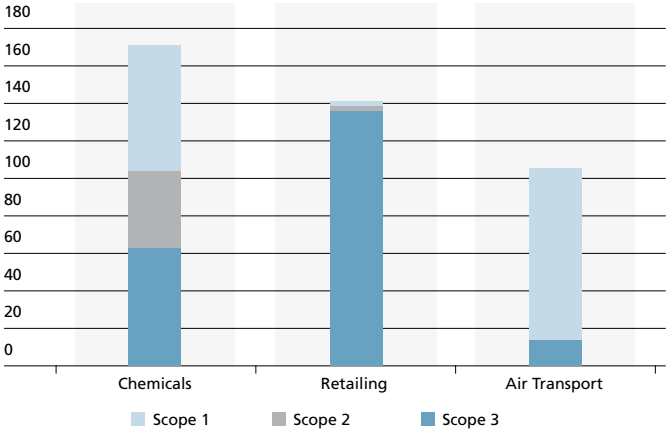
2.2. Methodology for measuring the carbon footprint of investment funds

Measuring the carbon footprint of portfolios pursues the ownership idea of holdings in that, if investors own part of the company through holdings, they also own part of the emissions – the difficulty lies in how to measure this. Even though there is currently no one single globally accepted methodology for calculating the carbon footprint of investments, all existing methodologies appear to follow the stages displayed below.

1. Identification of companies' GHG emissions

The most widely used tool and basis for company disclosure is the GHG Protocol[2] developed by the World Business Council for Sustainable Development and the World Resources Institute. The Protocol provides guidance and standards for companies reporting their GHG emissions and sets out the boundaries and different scopes by which footprints can be calculated. The GHG Protocol divides emissions into three scopes: scope 1 accounts for the direct emissions from sources that are owned and/or controlled by a company. For example, the combustion of fuels resulting from the use of machinery, or material processing. Scope 2 refers to emissions from purchased electricity. Scope 3 accounts for other emissions that are related to a company's activities but that are from sources not directly owned or controlled by the company.[3] This can include the emissions from raw material sourcing, from outsourcing activities or from a product's use phase. Most companies include scopes 1 and 2 in their carbon accounting, while scope 3 is often excluded as it is optional and could raise issues of double counting and of accuracy.

GHG emissions by scope (adapted from WWF & Vigeo)



Source: Asset 4

1. Identification of companies' GHG emissions

- Define scope (direct/indirect emissions)
- Look at individual company reported data

2. Estimation of companies' GHG emissions

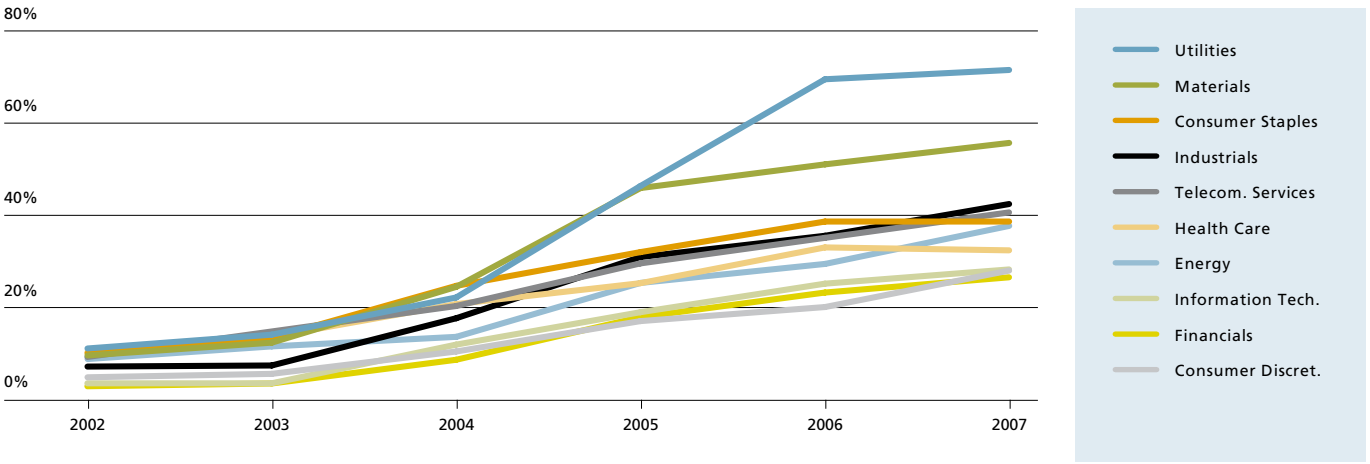
- Use sectors peers' carbon data
- Use sector-level data & aggregate by activity

3. Measurement of a fund's carbon footprint

- Snapshot of holdings

[1] WWF & Vigeo, 2009, "Entreprises et changement climatique: défis sectoriels et perspectives pour une approche globale"
[2] GreenHouse Gas Protocol Initiative: www.ghgprotocol.org
[3] GreenHouse Gas Protocol Initiative: www.ghgprotocol.org

Percentage of companies reporting - Total CO_2 emissions



Source: Asset 4

2. Estimation of companies' GHG emissions

While an increasing number of companies – driven primarily by investor pressure such as the Carbon Disclosure Project (CDP) or as a result of regulations such as the EU ETS – disclose carbon-footprint-related data, many do not voluntarily divulge the information. In this case, companies' GHG emissions have to estimated.

An initial step in making these estimations is to examine company disclosures, which can take the form of annual reports, sustainability reports and other website information. The scope of emissions included in the calculations is also determined. Total energy consumption – whereby energy-to-CO_2 conversions can be compared to those of sector peers to verify the data – can provide a strong basis for making estimations. For companies that fail to fully disclose energy consumption, estimations on GHG emissions data can be calculated from looking at sector peers' carbon accounting or per business activity. This figure is also normalised – usually by revenue, though certain methods opt to normalise by employee number, number of hours worked or other criteria.

Companies' GHG emissions are also estimated by the Economic Input-Output Model and Life Cycle Assessment (EIO-LCA) method, which is based on the traditional EIO model, but adapted to "estimate the materials and energy resources required for, and the environmental emissions resulting from, activities in our economy."[4] Though this method can be used to measure a variety of other environmental impacts such as water intensity or waste quantity, it is often applied to GHG emissions estimations. It involves the use of sector-level data quantifying the number of GHG emissions that can be directly attributed to each business activity of the economy and the quantities obtained from other activities to produce its output. The GHG emissions obtained for each business activity are then allocated to companies' activities by revenue. The combination of both methods allows, to a certain extent, the issue of boundary definition associated with the LCA to be overcome – as various economic transactions, resource inputs and emissions from all industry sectors and self-sector transactions are included.

To allow a comparison to be made between sector peers, absolute emissions are normalised by calculating emissions per revenue. Relative emissions are then reported as emissions in metric tonnes of CO_2 per million (dollar/euro) of revenue.

3. Measurement of a fund's carbon footprint

To calculate a portfolio's carbon footprint, a snapshot of holdings is taken at a given moment. Each holding's GHG emissions, obtained from company disclosure, from estimations or from a combination of both, are expressed in emissions in metric tonnes of CO_2, and then calculated on proportion of ownership. The values are then added together to obtain the fund's carbon footprint. To enable a comparison with other funds or with the benchmark, the fund's absolute emissions are also normalised per USD/EUR invested to obtain its relative emissions.

Σ CO_2e emissions of holdings x proportion of ownership = Absolute CO_2e emissions of fund

[4] Green Design Institute, "the EIO-LCA method": www.eiolca.net/Method/index.html

3. Can the carbon footprint of investments be accurately measured? If it can, of what use is that to us?

3.1. Issues associated with measuring companies' carbon footprints

The reliability of companies' carbon data and the ability to accurately assess are strongly limited by the lack of consistency across data disclosure and by discrepancies in the existing methodologies. Various points can be raised in relation to the limitations of the methodologies currently used.

Although the GHG Protocol defines guidelines for reporting emissions, there still remain differences in companies' disclosure and in the extent of the scopes provided to measure their carbon intensity. Most companies tend to disclose the GHG emissions resulting from scope 1 and scope 2, and most methodologies are inclined to limit themselves to those levels too. Companies can opt to use either the equity-share or the control approach, influencing the GHG emissions accounted for. Under the equity-share approach, companies measure GHG emissions from operations according to the share of equity in the operation. Under the control approach, companies include 100% of GHG emissions from operations over which they have control but do not include emissions from operations in which interest is owned but with no control. There can thus be discrepancies, depending on the approach selected.

Scope 3 further highlights the inconsistencies that can arise when scoping GHG emissions. Although scope 3 is often excluded, it can be very significant, as, in some sectors, companies' indirect GHG emissions can be far greater than their direct ones. For instance, the automotive sector's indirect emissions, resulting from the use phase, are significantly larger than their direct emissions. When companies voluntarily disclose their GHG emissions, they are at liberty to choose which scope 3 activities to report. The GHG protocol, even if it doesn't provide as strict a set of guidelines on how to report scope 3 GHG emissions, does encourage companies to determine those that are relevant to the company. This may, for example, include the GHG emissions resulting from a company's product-use phase if this represents a large proportion of the product's carbon intensity and is especially relevant if the company is able to make its product less carbon-intensive.

Companies and methodologies that limit their calculations and estimations to scope 2 emissions tend to argue that they do this to avoid double counting. This reveals another issue associated with the reliability of the data. Double counting can arise when emissions from two processes overlap or when one company's scope 2 and/or scope 3 emissions correspond to another entity's scope 1 GHG emissions. For instance, a computer manufacturer may include in its carbon footprint the scope 3 GHG emissions related to computer use, while another company purchasing these computers will include the same emissions in its scope 1 accounting. Though there are measures in place to avoid double counting, particularly in the GHG protocol, it still remains a significant challenge.

Another concern associated with the accuracy of the data is the fact that the EIO-LCA model itself relies on estimations. Indeed, the sector-level data used is generally obtained from information submitted by industry to government for national statistical purposes. As with the acquisition of data on companies' GHG emissions, there remain gaps in disclosure and consequently incomplete sector-level data. Another factor limiting the accuracy of the data arises when GHG emissions are normalised, more often than not, by economic normalising factors such as revenue, rather than physical ones such as units of production. This poses a problem in that price fluctuations will influence companies' carbon footprint.

The accuracy of the data is further restricted by differences in the type of GHG emissions included in reporting and in methodologies. Companies that voluntarily disclose emissions generally do so by following the GHG Protocol guidelines, which cover the six GHG of the Kyoto Protocol – carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. Other initiatives, however, may include more or fewer GHGs. For example, the US EPA requires large emitters to collect data on more than eight GHGs.

Although the issues listed above limit the reliability of the carbon data, it is undeniable that measuring GHG emissions is helpful when attempting to quantify exposure to CO_2 constraints. By doing so, it also encourages further company disclosure, and forces companies to improve their sustainable performance. The CDP, for example, which has seen the number of companies answering its questionnaire rise from 235 to more than 2000 in five years, has played a large role in making companies accountable for their GHG emissions.

3.2. Issues associated with measuring the carbon footprint of funds

The accuracy of the procedures used to measure funds' carbon footprints is evidently constrained by all the points mentioned above as one is the input of the other but there are also other issues worth mentioning.

Measuring the carbon intensity of a fund involves looking at holdings' GHG emissions for the previous reporting year(s). The resulting figure is thus backward-looking and does not indicate how the fund's performance and the holdings' carbon footprints will evolve. This issue is further emphasised in the cyclical sectors, where GHG emissions and revenues can significantly vary from one year to the next depending on the state of the economy. To measure the carbon footprint of an investment fund, a snapshot of the holdings must be taken at a given moment. In this sense, the calculations are not dynamic as investment portfolios are forever changing. The value of a fund's carbon footprint at one particular point in time is thus not representative of the fund's footprint over time. From this perspective, carbon footprint data can solely provide information regarding the past performance (of the previous reporting year) of companies currently in the fund.

4. How can investors use this information?

4.1. Carbon footprints as an analytical tool

To understand how to use the carbon footprints of funds, it is necessary to understand what they represent.

What does the carbon footprint of a fund really indicate?

The fund's past carbon performance?	No
The fund's past exposure to climate change & carbon risks?	No
The fund's future carbon performance?	No
The fund's future exposure to climate change & carbon risks?	No[5]
Past performance & exposure (for the previous reporting year) of holdings included in the fund portfolio at the time of the snapshot?	Yes

As a fund's carbon footprint represents the combined past performance of the companies included in the portfolio at a given moment, it can be used as an investment management tool. Investors can look at holdings' past exposure to identify which companies are at risk and focus on these to evaluate how their carbon intensity will evolve or how it has evolved since. The carbon footprint of investment funds can thus provide a good starting point from which to assess sustainable performance but if its aim is to successfully mitigate climate change and carbon risk exposure, a more forward-looking and comprehensive approach is likely to be more suitable.

Sustainable and Responsible Investment (SRI) as a more multi-dimensional approach integrates positive and negative externalities for optimising stock-picking and takes into consideration a number of factors and criteria to identify which companies are more (or less) exposed to sustainability challenges such as climate change. If measuring the carbon intensity of funds aims to optimise stock-picking in terms of climate change exposure, it does not successfully do so, as carbon footprints are one-dimensional. It fails to consider other factors that can also impact financial performance and long-term value. For example, water intensity is increasingly emerging as an investment theme as investors now realise the potential risks associated with it. Similarly to carbon risks, water risks can have significant financial consequences for companies present in water-stressed areas or those with water-intensive products or production processes.

Considering the limitations associated with using carbon data as a sole indicator of sustainable performance, and the multi-dimensional nature of SRI analysis, exposure to climate change and carbon risks should be explored from various angles. The SRI analysis process would, for example, consider key performance indicators such as past GHG emissions exposure and the percentage of energy obtained from renewable sources. As SRI aims for strong long-term investments, the approach would also examine evolution rather than current performance by, for instance, focusing on emission-reduction targets, and whether previous targets, set by either the company or regulations, were met.

4.2 Carbon footprint data as a communication tool

Carbon footprint data is often used for external communication purposes. For consumer products, carbon footprint labels provide information to customers allowing them to assess how these products contribute to climate change. Under forthcoming legislative, and current investor, pressure, companies will have to disclose their carbon footprints, allowing stakeholders to better assess their environmental performance. It is thus logical that some investors have taken this a step further by using it as a tool to communicate the carbon footprint of their investments.

To satisfy investors who want to minimise the carbon intensity of their investments, new funds focusing on carbon have appeared in the marketplace in recent years. In that context, carbon footprints are essential communication tools. While thematic funds are likely to continue growing and branch out to other variables such as water or the bottom of the pyramid, investors wanting to use these indicators to communicate with stakeholders should be clear on what the figures take into account and what they truly represent.

5. Conclusion

Carbon footprint data and disclosure are increasingly being used by investors and others as a sustainable performance indicator. Having a quantifiable environmental impact, this data can be a useful means of identifying those companies which are, or which could be, at risk. Despite the problems associated with existing methodologies and the accuracy of the data, actions such as these are increasingly welcomed by SRI investors as they provide a starting point for the measurement of exposure to potential ESG risks, and give an early indication of how companies mitigate ESG risks and grasp such opportunities.

[5] The carbon footprint of a fund would indicate the fund's future exposure to climate change and carbon risks if from one year to the next, the portfolio composition as well as, for example, the companies' emissions and revenues, all remained exactly the same.

Sustainability analysis **of the Construction sector**

Sector characteristics

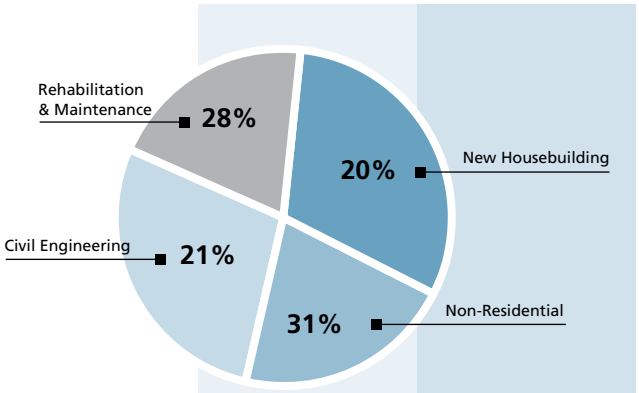
The heavily fragmented construction industry consists mainly of small and medium-sized enterprises (SMEs). With a combined European workforce of 16.3 million, the Construction sector is Europe's largest industrial employer, accounting for 7.6% of total employment and 30% of industrial employment (2008 data).[1]

The sector is composed of companies primarily engaged in non-residential construction and civil engineering. As described in the chart on the right, in terms of activity revenues, the house-building business, at European level, remains marginal.

As a result, the sector is heavily dependent on public spending or, at least, on local authority decisions: local (or national) authorities intervene first as direct customers (they account for 50% to 70% of sector sales in Europe), second, as regulatory authorities (with respect, for example, to spatial planning decisions or the implementation of new initiatives such as the Green Building Directive). The sector is also considered a key strategic tool by policymakers, who use it to soften economic cycles (e.g., by providing stimulation in times of recession).

Historically, larger construction firms have been built from the aggregation of smaller/family-owned entities and, as far as organisation goes, they remain fairly decentralised. As a result, their revenues still largely depend on their domestic market (with some exceptions, such as Hochtief and Skanska in Europe) and their internationalisation is often limited to engineering. Many construction companies, used to focusing on one single business, are now diversifying their activities. Over the past 10 years, while the Spanish construction sector has diversified in the renewable energy field (on more favourable geographical and regulatory grounds), most of the other big construction players chose to invest

Construction in Europe, 2008



Civil Engineering

roads
railways
bridges
tunnels
concrete structures
special foundations
electrical works
water sypply
wastewater treatment
works on maritime or river sites

Housebuilding

individual dwellings
apartment blocks
social housing
schemes

Non-Residential

offices
hospitals
hotels
schools
industrial buildings

Source: FIEC, Construction in Europe: Key Figures , Activity 2008, June 2009.

in concession projects. The combination of both activities actually offers an interesting mix, with high capital intensity and a steady source of (long-term) revenues for concessions, and lower capital intensity but shorter cycles on the construction side.

The construction market is in a weak position, with 2009 being the worst year in over a decade: the volume of construction output in the 15 Western European countries fell by more than 8% (more than twice the GDP contraction over the same period). The new-house building market – which is more closely linked to the real economy and which has suffered from the real-estate bubble – underwent the biggest drop.

In the coming years, while the investment level will vary from country to country, civil engineering, which was the only non-declining construction segment in 2009, will clearly be the first to benefit from any recovery.[2] In particular, it will be supported by the continuous interest of states in Public-Private Partnership (PPP). The growing enthusiasm for such a model is mostly backed by the concomitant obsolescence of existing public equipment[3] and by the falling public finances. However, in the context of the economic downturn, such partnerships require strong references from the private partners' side as investors are competing for bank debt in a very constrained market. In the aftermath of the credit crunch, those private partners have to adapt to a model requiring them to find financing from several financial institutions whereas, previously, they relied on a monoline financing model.[4]

Major sustainability challenges

Our in-house sustainability analysts have identified four key sustainability challenges pertaining to the overall sector: the management of human capital; service quality and operating efficiency; energy efficiency; anti-corruption. Each of these challenges is discussed below.

1. Managing the human capital

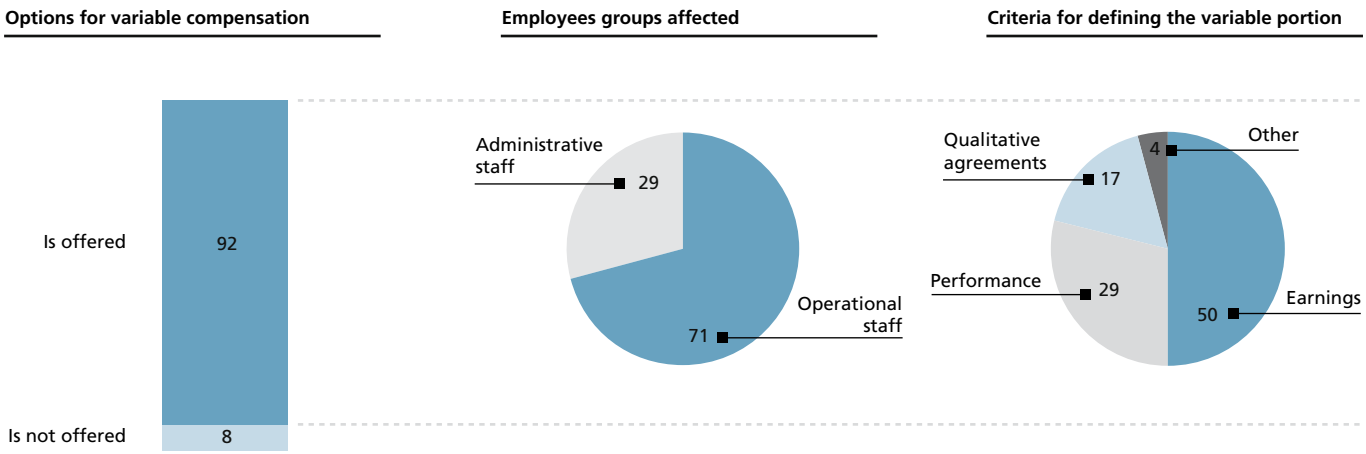
Human capital in the construction sector is a major challenge for three main reasons:

- The staff shortage observed in the sector;
- the level of risk of the sector regarding health & safety issues; and
- the cyclical character of the sector.

Attracting and retaining the operational labour force

The sector has deeply suffered from the growing shift towards university rather than apprentice-based training: unskilled or low-skilled workers represent more than 80% of the workforce on building sites (managers and technicians only 15%). Most construction companies are finding it difficult to recruit new staff. Headhunting competitors' human resources is a widespread practice. Voluntary staff turnover is a good indicator of a company's ability to retain their competences. In particular, the offer of a variable salary component is considered an attempt to make the sector more attractive. As illustrated by a survey conducted by Roland Berger Strategy Consultants amongst the 30 largest construction companies in Germany, the operational staff at nearly all companies surveyed are very likely to be on a variable salary.

Employee motivation, 2004



Source: Roland Berger Strategy Consultants, Success factors in the construction industry in 2004, Industry radar – Findings of the trend survey, Munich, June 2004.[5]

[1] FIEC, Construction in Europe: Key Figures, Activity 2008, June 2009 http://www.fiec.org/Content/Default.asp?PageID=5 (Accessed on 25 Sep 2009)

[2] Abrahamsen Y., European Construction Market Down in 2009 – Recovery from 2011 Onwards, Euroconstruct, 26/27 November 2009. http://www.euroconstruct.org/pressinfo/pressinfo.php

[3] Regarding infrastructure needs up until 2030 in member countries, the OECD puts total requirements in the road-rail-water-electricity-telecommunications field at USD53000bn. This increases to USD65000bn if energy projects are included. Moreover, the World Bank puts infrastructure needs at USD850bn per year worldwide up until the end of 2010. In developing countries, in a context of strong urban growth, priority is assigned to the construction infrastructure required to accompany economic and demographic growth. In the developed economies, besides the new infrastructure crucial to economic growth, modernisation and renovation work is needed after decades of underinvestment.

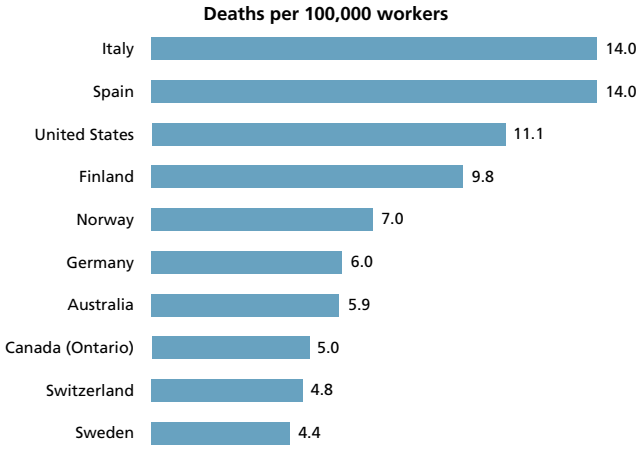
[4] Freshfields Bruckhaus Deringer, European infrastructure investors - Back to Classics, March 2009.

[5] Roland Berger Consulting, Survey: Success factors in the construction industry in 2004, June 2004.

Safety management on construction sites

According to the International Labour Office (ILO), construction workers are three-to-four times more likely to die from work-related accidents than other workers in the developed countries (in the case of the US, over 19% of all US work fatalities occur in construction, with the sector employing about 5% of the US workforce),[6] three-to-six times more in the developing economies. Even within the construction sector, the fatality rate differs drastically from one country to another, as seen in the chart below.[7]

Rate of deaths from injuries in construction, 2005



Source: Center for Construction, Research and Planning (*www.cpwr.com*)

Moreover, if on-site accidents attract more attention, it should not be forgotten that staff are also exposed to occupational illnesses such as asbestos-related diseases.

The human consequences of accidents are obviously considerable for the employee involved and his family, but any accident also has a financial impact for the employer, through direct and indirect costs such as loss of productivity, associated penalties, remedial and compliance costs for equipment safeguards, possible fines, litigation costs, the impact on the company's reputation and the decreased chances of winning contracts. Estimates of the hidden costs of workplace injury and illness vary greatly – anywhere from 1 to 20 times the injured worker's compensation premium.[8]

Change responsiveness: limiting the impacts on the workforce

Sector productivity is lower than that of other manufacturing industries and, in this labour-intensive sector, labour costs represent the second-highest cost segment after materials. Although the sector has always experienced significant seasonal and project-related headcount variations, advances in building technology (e.g., prefabrication and off-site production) tend to soften such cycles. However, in crisis/downturn periods, human resources are the first to be targeted by cost-cutting programmes. As employment/contract cultures differ from one region to another, so do approaches to "change responsiveness". However, for the past two years, all companies have tried to limit the level of job cuts as they wish to avoid past mistakes and, above all, the loss of key competences. The main measures taken comprised the reduced engagement, when possible, of temporary staff (e.g., in the UK, where it is not common to work with a high percentage of temporary workers, there were many more lay-offs than in continental Europe); others included the freezing of wages and hiring, structural/short time redundancies and unpaid leave.

Companies' ability to manage those three sub-challenges in the most sustainable and responsible way is assessed by our dedicated sustainability analysts in-house under the following themes within our proprietary sustainability analysis: "Training & Career Management", "Health & Safety" and "Change Responsiveness".

2. Safeguarding service quality and operating efficiency

Quality is a legal obligation and is the best business card that construction & engineering companies could wish for. ISO certification is now much more widespread within the sector. Nevertheless, companies remain tight-lipped on the difficulties encountered and on the financial consequences of bad planning, management or execution. The involvement of multiple parties (architect, builder, contractor, neighbourhood, local authority, owner, final user, and payer) and thus the resulting cross-responsibilities are a fertile breeding ground for conflict.

Quality encompasses not only the respect of the initial prescriptions governing the building/civil works, but also early anticipation of the costs and required time for completion, good communication between (or coordination on the part of) the parties involved, minimised delays, the obligation to exercise caution with regard to safety, and the reliability of the new technologies/materials (advanced coatings, materials combined with electro-fibres, etc.). Extra bad quality costs (induced by investigation, liability, remediation, removal and/or compensation) are substantial and may definitively affect earnings as well as reputation.

[6] Based on May 2008 last available statistics from the US Bureau of Labor Statistics (*www.bls.gov*).

[7] Center for Construction, Research and Planning (*www.cpwr.com*).

[8] William *et al*, 1997; Doorman, 2000; Viscusi, 2004; Burton *et al*, 2005; Oxenburgh and Marlow, 2005; NOHSAC, 2006.

In that perspective, and considering the high level of subcontracting (usually to small companies) in the sector (on average, 70 to 90% of activities are subcontracted), sustainable relationships between partners appear as a necessity. A rigorous and transparent process of supplier/subcontractor selection is not the only guarantee: it must be combined with fair and appropriate contract conditions, including:

- payment on time and according to agreed written terms of trade;
- a measure of performance based on agreed indicators;
- a restricted number of conditions for contract review and the avoidance of abusive clauses; and
- dialogue platforms (e.g., regular meetings, multilateral satisfaction surveys).

How individual companies tackle the challenges of service quality and operating efficiency on a day-to-day basis is examined by our dedicated sustainability analysts in-house under the following themes of our proprietary sustainability analysis: "Quality and Safety Assurance" and "Sustainable Relationships with Suppliers".

3. Enhancing energy efficiency

Pessimists would claim that the greatest market opportunities in the context of combating climate change relate to "adaptation" solutions, in the belief that society will need to adapt to the consequences of global warming (e.g., the construction of coastal defences to fight rising water levels). However, in the shorter term, energy efficiency is probably the field where construction companies will find the greatest market opportunities. States are inclined to promote better energy efficiency not only for environmental but also (more pragmatically) for security-of-supply reasons. In the case of Europe, the 2007 energy policy reaffirmed the objective of 20% energy savings and a similar reduction in greenhouse gas emissions by 2020. Buildings, as well as infrastructures, are identified as key leverage factors for achieving such targets.

The greening of buildings

Buildings account for 30-40% of global energy use[9] and are responsible for about 30% of greenhouse gas emissions. They are therefore an important component for CO_2 reduction. During an average building's lifetime, most energy (80%) is consumed, not during the construction phase, but during the building's "in-use" period (on heating, cooling, lighting, cooking, ventilation, etc.). Through good sustainable design and the implementation of energy-efficient technologies, carbon emissions can be reduced. New low-energy buildings can consume five times less energy than older constructions, while retrofits can save 8-16% of energy consumption.[10] However, while the refit and refurbishment cycles of a building range, on average, from 7 to 30 years, the rebuilding cycle ranges clearly exceed 50 years.[11] As a result, the major contribution to CO_2 savings by 2030 will be brought about by retrofitted buildings. In that sense, those construction companies with strong energy-related expertise are better positioned, as they will find the market richer in opportunities. Nonetheless, it is worth mentioning that the aforementioned theory on the advantages of green buildings is not yet supported by a strong track record: in particular, efforts have to be made to avoid natural human reluctance to new technologies and behavioural change.[12]

Enhancing the efficiency of infrastructures

From a civil works perspective, more efficient infrastructures (in energy, telecommunications, transport…) should be core components of any self-respecting government's policies and programmes. Within the road construction segment (that accounts for a big slice of the civil works market), better pavements and the availability of e-technologies to improve traffic fluidity and decrease congestion are promoted and contribute to the reduction in CO_2 emissions. Rail is certainly the segment that offers the best development perspective with regard to sustainable mobility. Rail infrastructure and, above all, the electrification of existing lines, will enjoy good growth levels.

The exposure of companies' business models to the challenge of energy efficiency is assessed by our dedicated sustainability analysts in-house from a "Resource Depletion", "Climate Change" and "Interconnectivity" point of view, while companies' ability to tackle this challenge is analysed under "Product-related environmental impacts".

[9] United Nations Environment Programme (UNEP) Sustainable Construction and Building Initiative (SBCI). Buildings and Climate Change: Status, Challenges and Opportunities.

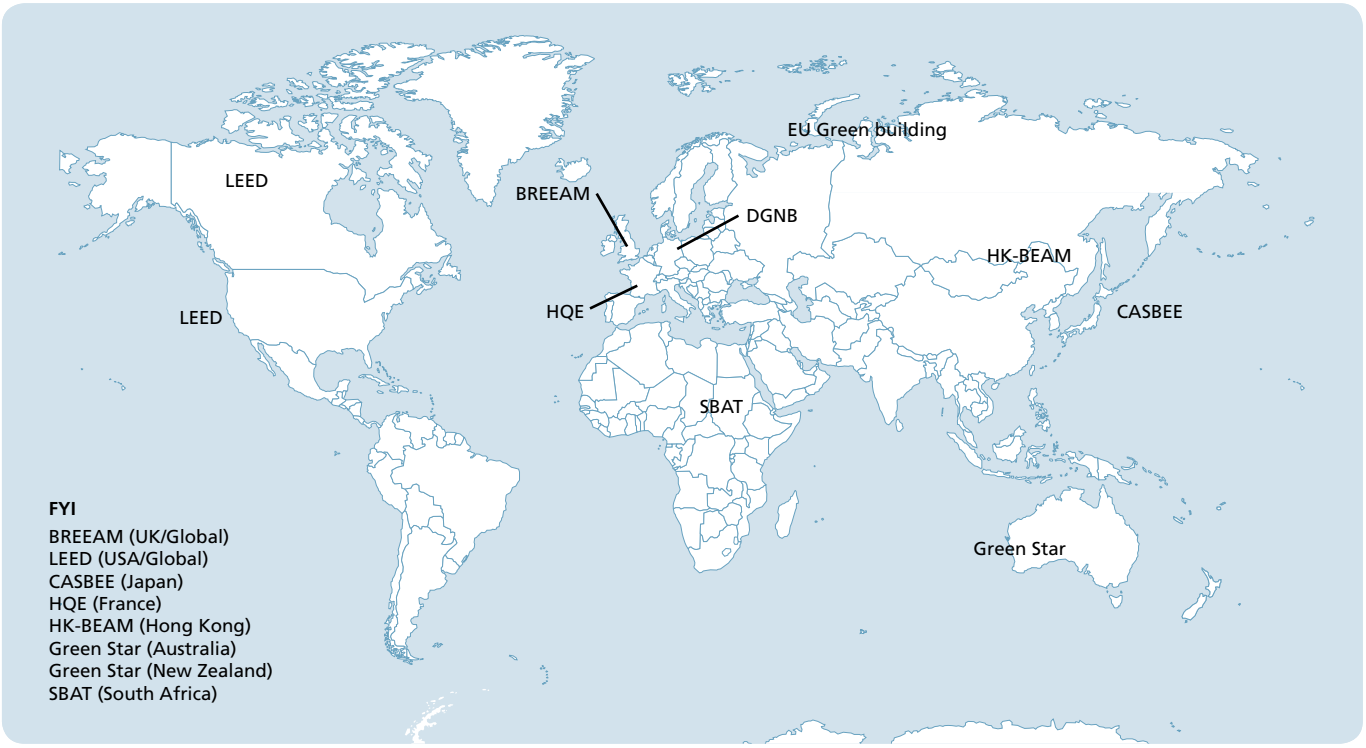
[10] Innovest (2006).

[11] Tyndall Centre, Establishing research directions in sustainable building design, Sep. 2003.

[12] National Research Council Canada, March 2010 (http://www.nrc-cnrc.gc.ca/eng/news/nrc/2010/03/01/green-building.html).

Green Building labels

Green Buildings consist in the practice of increasing the efficiency with which buildings use resources (energy, water, materials) while reducing the impact of building on human health and the environment, through better siting, design, construction, operation, maintenance and removal (i.e., through the entire building life cycle). Several successful assessment systems for green buildings have been developed worldwide.



	HQE	Green Star
Country	France	Australia
Development and publication	1997 by HQE association	2003 by Australian Green building council
Rating classification	Base, Performant, Très Performant	Four, Five and Six Stars
Major assessment categories	Local Environment Sustainable sites Materials & resources Energy efficiency Water efficiency Waste management Management Health & Well-being Sustainable construction sites & technologies	Management Indoor environment quality Energy Transport Water Materials Land Use & Ecology Emissions Innovation

Broad overview on BREAM, LEED and CASBEE

	BREEAM	LEED	CASBEE
Country	UK	US	Japan
Development and publication	1990 by Industrial Consortium (BRE)	developed in 1996 published in 2000 by United States Green Buildings Council (USGBC)	2002 by Japan Sustainable Building Consortium (JSBC)
Rating classification	pass, good, very good, excellent	certified, silver, gold, platinum	S, A, B+, B-, C
Major assessment categories	Management Energy use Health & Well-being Pollution Transport Land use Ecology Materials Water	Sustainable sites Water efficiency Energy & Atmosphere Materials & Resources Indoor environmental quality Innovation and design process	Energy efficiency Resource efficiency Local environment Indoor environment

4. Combating bribery & corruption

Transparency International[13] – the global anti-corruption organisation – publishes a "Bribe Payers Index", which identifies those industry sectors in which public officials are most likely to be bribed: the Public Works Contracts & Construction sector emerges as facing a disproportionately higher risk of being involved in corruption. In its 2005 report, Transparency International even went so far as to say that 10% of the USD3-4 trillion spent annually on construction procurement on a global scale was diverted to bribery and corruption.

Bribery & corruption as well as other anticompetitive practices such as price-fixing and bid-rigging have been facilitated in their development by some intrinsic characteristics of the construction and engineering sector: decentralized business models, locally operated bank accounts, the large sums involved (easier to conceal and more attractive bribes), a limited number of competitors for big projects and a complex contractual structure.

Financial penalties are not the only risk for the companies involved: reputations suffer, first with the potential loss of agency/government contracts (e.g., the blacklisting of seven construction companies by the World Bank),[14] followed by litigation and remediation costs. If infringements were common practice for many construction/civil work large caps before the new millennium, they are incontestably on the decrease. Under authority pressure, but also in line with the increasing importance of public procurement, (more transparent) larger European companies, responding proactively, have initiated a Business Integrity Policy/Code of Ethics and created the post of Compliance Officer (with regular training for managers and appropriate monitoring). Regulation such as the latest UK draft Bribery Bill, which introduces the concept of "negligently failing to prevent bribery" adds additional pressure by requiring from companies a guarantee of the robustness of their compliance system.[15]

How individual companies manage the issue of bribery and corruption is examined by our dedicated sustainability analysts in-house under the following themes within our proprietary Sustainability Analysis: "Anti-competitive practices" and "Relations with the Public Authorities".

[13] www.transparency.org/.

[14] http://web.worldbank.org/external/default/main?theSitePK=84266&contentMDK=64069844&menuPK=116730&pagePK=64148989&piPK=64148984.

[15] http://services.parliament.uk/bills/2009-10/bribery/documents.html.

Macro Sustainability Analysis

The most relevant, and equally weighted, key Sustainability Challenges (KSCs) for the Construction sector are:

- Resource depletion
- Climate change
- Interconnectivity

Two companies **in the Construction sector**

EUROPE: VINCI SA

Company description

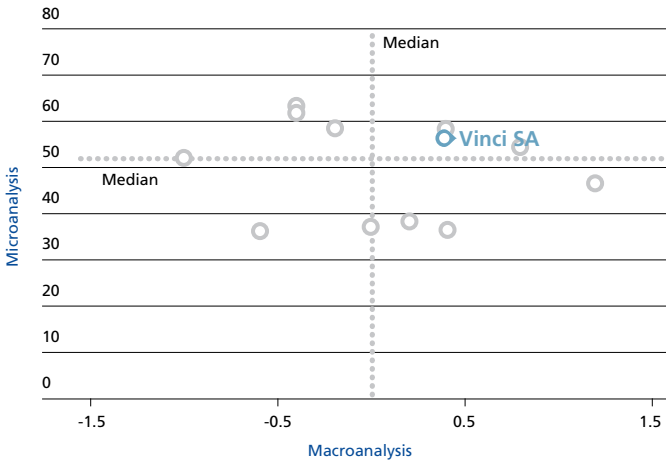
Vinci operates across two main sectors: concessions (the company finances, designs, builds and operates transport infrastructure & public facilities under public-private partnership contracts) and contracting, each accounting for about half of 2009 revenues. With more than 161,000 employees, Vinci is active in some 90 countries, with France accounting for more than 60% of sales.

Out of "traditional" contracting, the group has succeeded in occupying leading positions in several market segments, e.g., electrical engineering (Vinci Energies – 13% of 2009 revenues), rail & road infrastructure (Eurovia – 25% of 2009 revenues) and car parks (Vinci Park – 2% of 2009 revenues).

Macroanalysis

- **Interconnectivity** – On the purely physical mobility side, the group clearly benefits from its strong involvement in toll roads and rail: concessions account for 15% of the revenue but more than 45% of the 2009 net result. On the virtual mobility side, telecommunications expertise (12% of Vinci Energies), strengthened by the recent Cegelec acquisition, is considered an upside.
- **Growing and developing population** – Even though the group will remain focused on Europe, Vinci has had success in developing strong projects in eastern countries, the Americas and Africa. The non-European market accounts for 11.5% of revenues.

Company ranking in the Construction & Civil Engineering Sector



- **Climate change** – The group's being a major construction actor could be considered negative (because, for example, of it being a user of heavy carbon footprint materials such as cement). However, this negative picture can be moderated by Vinci's expertise in some interesting climate change-related segments, e.g., energy-related consultancy and rail expertise. In the same vein, while the group's macroprofile is negatively impacted by its involvement in highways and airports, some subsidiaries have a more positive influence (e.g., CFE, which processes projects related to the adaptation to, and mitigation of, climate-change consequences).

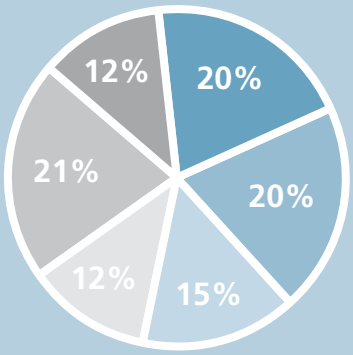
Micro Sustainability Analysis

Weighting of each stakeholder and major themes within the Construction sector:

Society
Public Authority Relations

Customers
Quality & safety assurance
Anti-competitive practices

Suppliers
Sustainable relationships



Investors
Corporate Governance
Sustainable Governance

Employees
Training & career management
Health & safety
Change responsiveness

Environment
Product-related environmental Impacts

- **Resource Depletion** – We follow the same logic as for climate change, in light of growing urbanisation and the expansion of infrastructure, by reducing water infiltration and fragmenting landscape, which are both a major threat to biodiversity. However, we also take as positive the group's expertise in hydraulic construction (3% of 2009 revenues).

Microanalysis

- **Corporate Governance, Bribery & Corruption** – Vinci's practices are similar to other French companies'. The board has 13 members, half of whom are considered independent. It is also worth noting that, if the company respects the "one-share/ one-vote" principle, shareholders have approved a takeover prevention plan which would result in an inflated purchase price for any suitor making an unsolicited offer for the company.

  Regarding corruption, Vinci has been condemned for deeds dating back to the 90s. Since then, Vinci claims that major efforts have been made to hire and train internal control managers, whose tasks also include the prevention of anti-competitive practices. Relevant policies are in place and employees receive regular training. Vinci also mapped out its corruption risk, based on Transparency International's Corruption Perception Index.

- **Training & Career Management** – Although Vinci has chosen to freeze some staff categories' salaries since the crisis, the group, seeking to maintain the vitality of its recruitment pool, has never stopped recruiting young talent. In the construction segment (the most affected by the crisis), the group tried to limit redundancies and, as a main consequence, the number of temporary workers was reduced by about a third over 2008/09. Aware of the poor attractiveness and hardness of the sector, Vinci prioritised competence management and training.

- **Health & Safety** – This topic is a clear priority for the group, which has succeeded, over the past three years, in decreasing its injury severity and frequency rates by 10% and 18% respectively. The group is also actively working on the improvement of data monitoring at temporary worker level.

- **Quality & Safety Assurance, Sustainable Relationship Management with Partners** – By and large, innovation appears to be a core component of Vinci's quality management approach, combined with the achievement or renewal of its ISO 9001 certification for most of its activities. In terms of transparency, the group – just like the rest of the sector – does not want to communicate on data such as delays and related costs.

  An average 20% of Vinci sales are also dependent on subcontracting, even if, during the crisis, the group preferentially relied upon its own internal resources. The importance of sustainable relationships with subcontractors and suppliers in general is thus crucial for the delivery of good quality. In terms of credit periods, Vinci respects local regulations and "sector habits" and the period thus varies considerably in accordance with the country in question (60 days or more for Spain, while 30 days is more and more current in Germany and France).

- **Product-related environmental impact: Use** – As a major partner of public authorities, Vinci, just like its competitors, has progressively incorporated life-cycle analysis into its buildings projects (a requirement of public RFPs). In this respect, we cannot say that the group has been especially proactive. However, we appreciate its interest in eco-neighbourhoods and the rehabilitation of built structures, through which it can also optimise synergies between its branches.

EUROPE: ROYAL BOSKALIS WESTMINSTER

Company description

With revenues of EUR 2,175 million for 2009 and around 10,500 employees, Royal Boskalis Westminster is a leading player in the world dredging market.

The group's core services are the construction and maintenance of ports and waterways, land reclamation, coastal defence and riverbank protection. Such activities are broken into three different business segments: Dredging and Earthmoving, Maritime Infrastructure (mainly through Archirodon) and Maritime & Terminal Services (Lamnalco). The ongoing acquisition of Smit (which focuses on towage and related services, but is also involved in salvage and wreck removal) will actually reinforce this last branch.

Macroanalysis

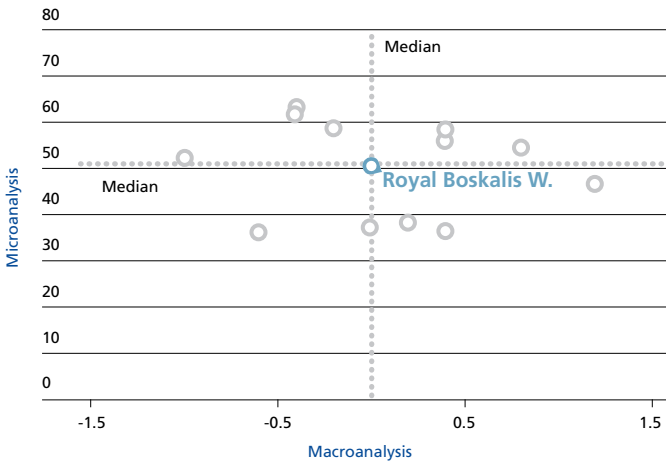
Royal Boskalis Westminster has a contrasting macroprofile.

- **Climate change** – Even if Royal Boskalis Westminster's business is still heavily linked to the Oil & Gas sector through its activities related to exploration, production and transport infrastructure, the group nevertheless accounts for about 20% of the world open dredging market. Its expertise makes the difference when dealing with coastal defence and other projects resulting from measures designed to secure adaptation to Climate Change. The latter clearly pleads in favour of the group's macroprofile: according to the United Nations Framework Convention on Climate Change (UNFCC), significant investments (between USD4bn and USD10bn, depending on the chosen scenario) in beach nourishment and sea dykes will be needed to tackle the sea-level rises caused by climate change between now and 2030.
- **Resource Depletion** – Dredging activity is negatively scored as it is a threat to biodiversity, in particular through the removal of sediments and the resulting alteration of habitat/water quality.
- **Growing and developing populations** – Europe (including the Netherlands) accounts for about 25% of group revenues. The remaining sales revenue comes primarily from the Middle East/Africa and Asia/Oceania. As a consequence, the group is ideally positioned to benefit from land reclamation initiatives in anticipation of major population growth.
- **Interconnectivity** – The group's involvement in maritime activities (e.g., port construction, maintenance and terminal services, all of which have been further reinforced by the acquisition of Smit) is viewed as positive, considering the growth of maritime transport and the perspective of infrastructure development in this field.

Microanalysis

- **Corporate Governance, Corruption & Bribery** – Royal Boskalis Westminster operates a two-tier board system consisting of one management and one supervisory board, the latter not fully independent. Even if there is no official "poison-pill" system in place, Royal Boskalis Westminster has a foundation which could take cumulative protective preference shares in the company. With respect to corruption practices, the group is strongly committed to outlawing infringements and, contrary to many of its peers, has not been heavily fined over the past 10 years for any mispractice.

Company ranking in the Construction & Civil Engineering Sector



- **Training & Career Management** – When taking proportionally into account its principal affiliated companies, Royal Boskalis Westminster boasts just over 10,500 employees. The group has an Operational Development Programme for younger and senior project managers alike. In parallel, it has a comprehensive set of training courses targeting different positions. These include the Boskalis Maritime Development Program for engineers and onboard captains, and training for foreign crew members. For recruitment, the group profits from its network of ancient partnerships with universities well known for providing education in the maritime field.
- **Health & Safety** – Since 2006, the group has decreased its Lost Time Injury Frequency Rate by more than 50% and now ranks above average in the sector. In addition, at Boskalis International, home markets and specialist niche services have achieved close to full OHSAS 18001 certification (international health & safety standard).
- **Quality & Safety Assurance** – Apart from the characteristics inherent in the ISO 9001 certification that governs quality management (and in which the group has been involved since the 90s), we particularly appreciate the work done on "Value-Driven Maintenance" (cost-efficient ways of managing and coordinating the maintenance of the fleet, which is being progressively extended to the whole fleet). This work is interesting in terms of the group's own assets and with respect to marketing, as the group itself could become a showcase for clients. Clients' satisfaction is actually at the heart of Royal Boskalis Westminster's strategy: the shift to a multidisciplinary approach and offer is an example of the response to clients' new expectations and identified in client satisfaction surveys.
- **Protection of Biodiversity** – the group has shown its proactivity on this issue since 2006, with a dedicated programme designed to better understand, and research, the impact of human intervention on the ecosystem of the river, coastal and delta areas. The programme, launched in partnerships with companies and governmental and scientific bodies, and faithfully reflecting best practices in the dredging sector, is due to end in 2011. In the same perspective, the group is pursuing the reduction of grease consumption and investigating the possible use of biodegradable grease, as a means of limiting the impact of grease on marine life.

Interview with **Laurent Milliat,**

Sustainability Analyst at Dexia AM

In this interview, we look at the impact of energy efficiency on the utilities sector. The momentum for energy efficiency is mounting, in the wake of the climate change debate. But what impact will this have on the business models of the utilities sector? This is the focus of our interview with Laurent Milliat.

1 What is energy efficiency in general? How would you define it?

Energy efficiency is about using fewer energy sources to obtain the same services. By definition, energy efficiency can be measured as the ratio between a service that is delivered and the energy it requires. For the same quality of service (lighting, heating, cooling, etc.), energy efficiency reduces the input energy required by the end-use application. In the context of our focus on the utilities sector, energy efficiency relates to end-use energy efficiency rather than energy efficiency in the whole energy system (production, transportation and distribution). The key focus is on the demand side of energy-utility activities, rather than the traditionally dominant supply-side view of the sector.

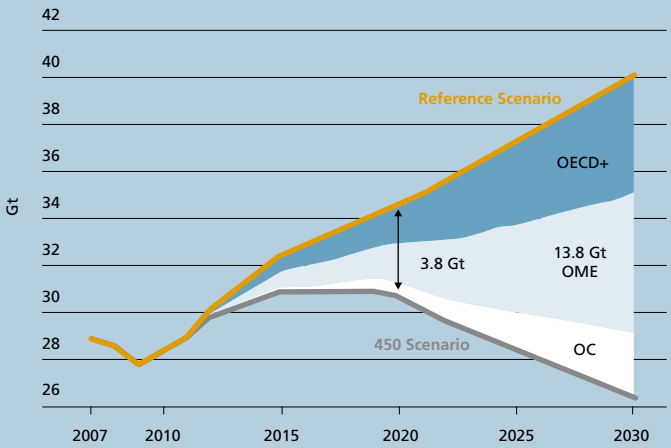
2 When looking at sustainability challenges in the utilities sector, people often look at two environmental topics: CO_2 emissions and renewable energies. But could you tell us why energy efficiency is such a relevant issue for investors?

Most investors in the utilities sector are familiar with the first two targets of the European Union "energy and climate package": the 20% reduction in CO_2 emissions by 2020 and the 20% share of renewables in the energy mix by 2020. But most investors are paying much less attention to the third target, which calls for a 20% reduction in energy consumption by 2020.

However, this lower-profile target is increasingly becoming a priority for governments. Indeed, the benefits of energy efficiency for society in general are widely acknowledged. When you are an energy consumer, the cleanest, most reliable and cheapest energy is the energy you don't use. Energy efficiency is really a "triple-win" solution to the three main energy-related challenges that are: climate change, security of supply and affordable access to energy.

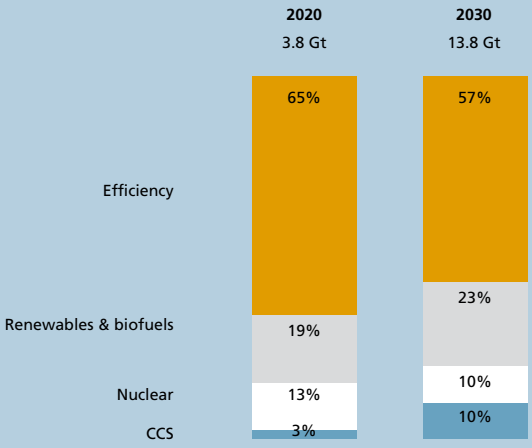
Energy efficiency provides a solution to environmental problems at local level (by reducing atmospheric pollution, water use and waste) and at global level (by mitigating climate change). Beyond the "decarbonisation" of power generation, improving end-use energy efficiency is both the largest and the cheapest option for fighting climate change.

World energy-related CO_2 emission abatement



Source: International Energy Agency (January 2010)

World abatement by technology



3 So the momentum for energy efficiency is growing among energy consumers and among policymakers. But, what does energy efficiency mean for the European utilities sector?

Energy efficiency is clearly a threat to their traditional business model. Utilities are penalised by declining energy volumes. The current economic environment is clear evidence of how energy-demand destruction is negative for utilities.

The main conclusion of the research paper on the subject that we drafted is that, in mature regions such as Europe, utilities investors need to consider that the lower energy demand is not only cyclical (due to the economic recession) but that there are structural factors associated with energy efficiency efforts by customers and regulators. If regulatory and market changes are successful in achieving energy efficiency savings, this could be detrimental to utilities' profitability.

4 But is energy efficiency only a threat or are there any business opportunities that utilities will be able to grasp?

Utilities need to adapt to this new "energy efficient" environment by diversifying away from declining markets and, instead, extending their portfolio of activities to new growth areas. They basically have three options:

- continue to apply their traditional business model elsewhere, with international diversification in the emerging markets (where energy demand will grow);
- invest in electricity generation from renewable sources, such as wind or solar (where most of the capex growth will come in the next coming years);
- add energy efficiency services to their portfolio of activities. Utilities can make energy efficiency a profit centre. It is in the best interests of utilities to do more than just generate and ship units of energy: they can benefit from offering energy services.

5 What do you mean by offering "energy services", and which utilities companies are well positioned in this matter?

Let's take two examples:

- In the UK residential market, Centrica and Scottish & Southern Energy are well positioned to benefit from offering new energy services to households. Centrica, for example, uses its network of 9,000 engineers to offer packages that include energy audits, insulation works, energy-efficient boilers, microgeneration solutions or smart meters.
- In the institutional energy market, for industrials or municipalities, Veolia Environnement and GDF Suez will benefit from their large energy services divisions, Dalkia and Cofely. Large energy customers are interested in optimising their energy consumption, reducing their costs and their environmental footprint with the help of energy specialists such as Veolia and GDF Suez.

6 From a financial perspective, how attractive are those energy efficiency services? Why should investors focus on such activities?

The benefits of investing in energy efficiency services are clear. Let's take the UK residential market as an example. In competitive energy supply markets, energy efficiency services are a means of attracting new customers, increasing their value and securing their loyalty. Centrica estimates its customer churn rate is 30% lower among customers who have energy and services compared to customers with energy only. Services generate higher growth rates and higher margins than energy supply.

At a time when long-term energy costs are expected to rise and new energy efficiency policies are reinforcing energy conservation, we believe that an energy services division constitutes a strong advantage in a utilities portfolio of activities. From a valuation point of view, we are convinced that utilities investors will use higher and higher multiples to value such activities. There is still some hidden value in there. Utilities investors need to be aware of this trend and position themselves on the segment early on, to fully benefit from it.

News

Unusually high number of **corruption cases investigated**

BAE Systems gave a Saudi Arabian official perks, including travel, property and cars, worth more than USD5 million in nine months, the US Department of Justice has claimed in a legal document filed in court. At the same time, US and Ghanaian authorities are investigating corruption allegations involving Kosmos, a Texas oil company and the local partner that helped it secure control of the Ghanaian oil block that yielded one of Africa's biggest recent discoveries. Nine British companies are being investigated by the American authorities for allegedly paying bribes to win business in overseas markets, according to a study by Freshfields Bruckhaus Deringer.

All of the aforementioned cases indicate the growing reach of the international regulators. Multinational companies are being investigated under a US law which gives American regulators jurisdiction to pursue any foreign company that conducts part of their business in the US. Dexia AM incorporates all significant corruption cases in its sustainability analysis and favours companies that take precautionary measures, especially in vulnerable sectors.

The Times
Financial Times
The Times

EU approves **GM potato**

German chemical giant BASF this week won approval from the European Commission to commercially grow a starchy potato with an antibiotics-resistant gene. Genetically modified products are carefully addressed in DAM's sustainability analysis of companies.

The Independent

Japanese firms recall faulty vehicles

Nissan, Suzuki and Daihatsu have issued significant vehicle recalls because of problems with their electronics – the area that some believe to be the unresolved fault with Toyota cars. Industry insiders said the carmakers were responding to both public and governmental pressure to make the image of Japan "squeaky clean" in the wake of the Toyota crisis. The worldwide collapse in sales of Toyota's bestselling Prius has forced the Japanese car giant to make a significant cut in production. It follows the global recall of 8.5 million cars, including nearly 450,000 Prius hybrid models amid claims of defective accelerator pedals and braking systems. Product quality and safety is analysed as part of DAM's sustainability analysis of the "Customer" stakeholder dimension (one of the six key stakeholder themes), with "number" and "frequency" being two of the key performance indicators used to evaluate differences among companies.

The Times
The Times

Secret mobile phone code cracked

Computer hackers announced that they had cracked and published the secret code that protects 80% of the world's mobile phones. The move will leave more than 3bn people vulnerable to having their calls intercepted, and could force mobile phone operators into a costly upgrade of their networks. A German encryption expert said he had organised the hack to demonstrate the weaknesses of the security measures protecting the global system for mobile communication (GSM) and to force mobile operators to improve their systems. Within all companies involved in telecommunication technologies, information security & consumer privacy is one of the issues subject to DAM analysis.

Financial Times

Google threatens to quit China over cyber attacks

Google dramatically threatened to shut down its business in China after discovering that hackers had been trying to spy on human rights campaigners using its e-mail system. The internet giant said it was one of over 20 companies subjected to a sustained cyber attack in December, as hackers sought details on the activities of Chinese dissidents and American and European campaigners advocating for human rights in the country. In response, China made it clear that it would ignore any ultimatum from Google concerning the relaxation of internet censorship, and reminded all companies that they must strictly abide by the state control of the country's cyberspace. Microsoft, which also has considerable interests in the country, responded directly to criticism by Google saying it would continue to obey local laws on censorship in China. Free access to information is a component of freedom of speech and thus part of the universal declaration of human rights. DAM's sustainability analysis is following developments in internet censorship in China (among other countries) and analyses all internet and technology companies' approach to censorship in terms of product quality and safety.

The Independent
The Times
The Guardian

More **female directors** on boards

Gordon Brown threatened "serious action" to ensure that companies appointed more female directors unless there was a sharp increase in the number of women on company boards. At present, research by Cranfield University suggests that only 12.2% of the directors of FTSE 100 companies are women and a quarter of the companies have all-male boards. Meanwhile, the German telecoms group Deutsche Telekom said that it would introduce a quota for female managers, with a target to fill 30% of upper and middle management jobs with women by the end of 2015. That would compare with only 13% in 2008. Gender diversity is analysed as part of DAM's sustainability analysis of the "Employee" stakeholder dimension (one of the six key stakeholder themes) of all companies covered and all initiatives by companies to balance the gap between the sexes in top management are noted in the respective company analysis.

Financial Times
The Times

Our SRI funds acknowledged by **Morningstar and Tageblatt** in Luxembourg

Morningstar and the *Tageblatt* newspaper, in partnership with Dexia BIL, have acknowledged the top funds issued in Luxembourg as well as the top asset management companies.

The special "Luxembourg Fund Award" was granted to Dexia Asset Management's SRI range. The company has been involved in sustainable and responsible investment since 1996. Dexia Asset Management, which, as at end March 2010, was managing some EUR19.5 billion in SRI (of which EUR5.6 billion fully invested in sustainable management and EUR13.9 billion in tailor-made SRI products), received the award for the rigorous and longstanding implementation of its SRI strategy.

The awards were presented during a dinner held at the Cercle Munster and reserved for VIPs in the financial and investment fund industries. Mireille Defawe, Head of Corporate Coordination & Strategy at Dexia Asset Management Luxembourg, and Pierre Malevez, Member of Dexia BIL's Management Committee, represented Dexia Group at the event.

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You will also find information on our internet site at **www.dexia-am.com.**

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